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**CITY OF RIVERSIDE**  
**HUMAN RESOURCES DEPARTMENT**  
**CLASSIFICATION SPECIFICATION**

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12/19/05*Revised*

**TITLE: UTILITIES ELECTRIC APPRENTICE  
UTILITIES ELECTRIC APPRENTICE TRAINEE  
(ENERGY DELIVERY)**

**DEFINITION**

Under supervision, to perform increasingly skilled work assisting skilled workers and gaining experience in the construction, maintenance and repair of the electrical distribution, transmission or substation system through a formal on-the-job training program; and to do related work as required.

**DISTINGUISHING CHARACTERISTICS**

This is a full-time, entry level classification in which incumbents gain experience in performing increasingly skilled work in the construction, maintenance and repair of electric distribution transmission or substation systems through a formal on-the-job training program consisting of one year as a trainee and four years as an apprentice for distribution and transmission or three years as an apprentice for substation. Upon successful completion of the program, incumbents shall meet the requirements for full journey level and may reasonably expect to be promoted to the next higher level. In the first year the candidate will be required to learn all the basic fundamentals of daily electrical or substation work, including the nomenclature and use of all tools of the trade and materials. The successful candidate must be able to demonstrate their continued improvement both in the field and during apprentice meetings with certain degree of proficiency or they may be terminated from the program. Those promoted to the apprentice position will be enrolled in one of the City's formal Utilities Electric Apprentice training programs. Continued satisfactory progress and successful completion of the program are also requirements for successful completion of the probationary period. Successful candidates will be required to complete a Home Study Apprentice Course and maintain passing scores. Incumbents will also meet with the Apprentice Committee once a month and must be able to answer questions with some degree of proficiency directly pertaining to their training, or they may be terminated from the program. A non successful incumbent, previously employed by the City of Riverside prior to entering the program may or may not be allowed to return to their previous position based on position availability. If the incumbent is not an employee of the City of Riverside, prior to entering the program, they will be terminated from employment.

**REPORTS TO:** Utilities Electric Supervisor, as assigned.

**SUPERVISION RECEIVED AND EXERCISED**

Receives close supervision from the Utilities Electric Supervisor, as assigned.

**EXAMPLES OF DUTIES**

When assigned as an Utilities Electric Apprentice or Trainee, duties may include, but are not limited to, the following:

- Assist in basic construction, maintenance and repair of underground and overhead electrical transmission and distribution cables and lines working under supervision of journey level workers.
- Assist in the basic construction, assembly and/or installation of vaults, metal clad switchgear, pad transformers, insulators poles, conductors, cables and other electrical equipment.
- Assist in basic installation, maintenance and repair of electric street lighting systems.
- Assist in the basic testing, installation, maintenance and repair of electric meters.

- Assist in basic operation of a cable-splicing or line crew truck, laying out and passing tools and equipment to journey level workers.

When assigned as an Utilities Electric Apprentice (Distribution and Transmission), duties may include, but are not limited to, the following:

- Assist at an intermediate level, construction, maintenance and repair of underground and overhead electrical transmission and distribution cables and lines working under supervision of journey level workers.
- Assist in the construction, assembly and/or installation of vaults, metal clad switchgear, pad transformers, insulators poles, conductors, cables and other electrical equipment.
- Assist in installation, maintenance and repair of electrical street lighting systems.
- Assist in the testing, installation, maintenance and repair of electric meters.
- Operate a cable-splicing or line crew truck, laying out and passing tools and equipment to journey level workers.

When assigned to Utilities Electric Apprentice Trainee (Substation), duties may include, but are not limited to, the following:

- Assist in the basic installation, testing, maintenance and repair of substation equipment including air, vacuum and oil circuit breakers, supervisory equipment, transformers, load tap changers, batteries and associated substation equipment.
- Assist with basic maintenance and repair of pilot wire cable, and assist with making aerial splices as required.
- Assist in basic installation and repair of overhead disconnects on substation structures.
- Assist in basic termination of underground cable and wiring on conductors on underground and overhead buss work in substation.
- Assist in basic manual switching as required.
- Assist in basic maintenance of records on substation equipment.

When assigned to Utilities Electric Apprentice (Substation), duties may include, but are not limited to, the following:

- Assist at an intermediate level, the installation, testing, maintenance and repair of substation equipment including air, vacuum and oil circuit breakers, supervisory equipment, transformers, load tap changers, batteries and associated substation equipment.
- Assist with maintaining and repairing pilot wire cable, and assist with making aerial splices as required.
- Assist in the installation and repair of overhead disconnects on substation structures.
- Assist in terminating underground cable and wiring on conductors on underground and overhead buss work in substation.
- Assist in manual switching as required.
- Assist in maintaining records on substation equipment.

## **QUALIFICATIONS**

### **Knowledge of:**

- Basic electricity, increasing to intermediate at the appropriate level and full journey level upon completion of the program.

**Ability to:**

- Learn approved methods, materials and tools used in underground lines and substation or overhead line construction, maintenance and repair.
- Learn occupational hazards and safety precautions necessary in the work.
- Learn to climb poles and work in close quarters.
- Understand and carry out moderately complex oral and written instructions.
- Perform heavy manual tasks under varying weather conditions.
- Perceive colors accurately.
- Climb and work from elevated platforms, scaffolding, ladders and steel structures while using appropriate fall protection equipment.
- Learn to use and care for cable-splicing and line tools and equipment.
- Work overtime as required.

**Education and Experience:**

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Utilities Electric Apprentice:

Education: Equivalent to the completion of the twelfth grade.

Experience: One year of experience performing duties comparable to those of an Utilities Electric Field Helper in the City of Riverside.

Utilities Electric Trainee:

Education: Equivalent to the completion of the twelfth grade.

Experience: One year of experience performing duties comparable to those of an Utilities Electric Field Helper in the City of Riverside, or two years experience in an electric wiring craft position. 12 credit units at an accredited college or university in electrical and/or math is highly desirable.

**MEDICAL CATEGORY:** Group 2

**NECESSARY SPECIAL REQUIREMENT**

Possession of, or ability to obtain, an appropriate, valid California Class "C" motor vehicle operator's license.

Enrollment and continued satisfactory progress in the formal Utilities Electric Apprentice training program with achievement of established standards.

**CAREER ADVANCEMENT OPPORTUNITIES**

**FROM:** Utilities Electric Apprentice Trainee

**TO:** Utilities Electric Apprentice

**TO:** Utilities Power Line Technician, Utilities Substation Electrician or Generation Technician